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## ABSTRACT

Parenthood is a normal event in which the birth of a baby temporarily upsets the internal structure of the family system as boundaries, roles, and tasks are reorganized to accommodate the new member. In understanding how interactions between and within spousal and parental relationships affect parental adjustment, concepts of development need to be considered. Described in this paper is one way of conceptualizing and measuring family interactions in the childbearing family. Specifically discussed is a self-report method intended to assess men and women with regard to (1) changes in the marital relationship from just before to 5 months after the birth of the first child; (2) the association between individual functioning and the marital relationship before and after the birth; and (3) the interactions among parents' coping, perceptions of infant temperament, and the marital relationship after the infant's birth. A proposed developmental study implementing the model is described.  
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Interactive Processes in the Childbearing Family:  
Conceptual and Methodological Issues

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Interactive Processes in the Childbearing Family:  
Conceptual and Methodological Issues

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In a landmark paper on parent-infant interaction Belsky (1981) points out that the classic and emergent literature on transition to parenthood and on infant behavior and development focuses either on the couple relationship or on the parent-child relationship, but seldom on the family system as a whole.

The aim of this paper is to describe a conceptual framework that operationalizes aspects of family interactions. Specifically, this report will discuss a method to assess men and women through self-report, regarding: (a) changes in the marital relationship from just before to 3 to 5 months after the birth of the first child; (b) the association between individual functioning and the marital relationship before and after the birth; (c) the interactions between coping, perception of infant temperament and the marital relationship after the infant's birth. Parent-infant interactions will be examined by observation and recording techniques. Measurement and analysis issues will also be addressed.

Marital adjustment is defined as each spouse's perceptions of their interpersonal interactions involving autonomy and affiliation patterns in relation to self and partner as well as by perceptions of adjustment to the marital relationship. Individual functioning is described through absence of symptoms of depression reflecting unhappy affect and mood, helplessness and lack of energy in daily activities and anxiety evidenced by restlessness, nervousness and tension. Parental coping behaviors are represented by individual cognitive and emotional behaviors and by utilization of network support and resources in the family and community. Infant temperament is assessed by the parent's perceptions of the infant's smiles, responses to soothing techniques and behaviors exhibiting fear and distress. Parent-infant interactions are investigated by observational analysis of parents' responses to infant demands.

Background/Previous Work

Earlier research by this author (Ventura, 1982; Ventura and Boss, 1983) examined relationships between parental coping behaviors, infant temperament characteristics and parent functioning of 200 parents of 2 to 3 month-old infants. This research utilized a family systems approach in which parenthood was assumed to be a normal developmental event that caused stress. Coping behaviors operationalized the B factor, family resources, in Hill's family stress model (Hill, 1965). It was postulated that the more the family adapted the less vulnerable they would be to stress (Burr, 1973). Parent functioning and parental perception of infant temperament operationalized aspects of the model's C factor, namely, how the parents defined the event.

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Low but significant correlations suggested a positive interaction between parental coping behaviors, optimal infant temperament and parent functioning. Coping behaviors helpful to couples experiencing new parenthood were directed at obtaining emotional support from one another, developing a commitment to parenthood, and maintaining a positive attitude toward the situation.

These results indicated that individual feelings, goals and attitudes within the couple's relationship were important factors to consider for the childbearing family. Current discussion of methodological issues in family research supported these conclusions by stressing that dyadic properties of spousal relationships needed to be identified, conceptualized and operationalized (Belsky, 1981; Thompson and Walker, 1982). Although measures of parental coping and parental perceptions of infant behavior appeared to be useful self-report dimensions of parenting, other methods of studying parent-child interactions were necessary to validate these relationships.

For example, ongoing research (Ventura, in progress) indicates that 1) parents use a wide variety of techniques (visual, auditory, tactile, and kinesthetic) in managing fussy behaviors of young infants; and 2) parents who perceive their infant to be fussy are more depressed and anxious and are less involved in maintaining family integrity. Clinical interviews further indicate that parents report sleep deprivation and infant crying as major problems during early parenthood. Observing the process of infant crying and parent's responses to the behavior in the home setting could provide information about the process, dynamics and behavior of parents that validate some of the relationships between parent functioning, coping, and infant temperament suggested by self report findings. This paper then clarifies some of the conceptual and methodological issues generated by the author's initial research.

### Theoretical Perspectives

Parenthood is a normal event in which the birth of a baby temporarily upsets the internal structure of the family system as boundaries, roles and tasks are reorganized to accommodate the new member. In understanding how interactions between and within spousal and parental relationships affect parental adjustment, concepts of development need to be considered.

In the normal biological process the parental role is attained following a developmental sequence that involves an attachment period, partial weaning or detachment, and a period for gradual development of peer play and social skills. This biological sequence is compatible with aspects of psychoanalytic theories describing dimensions of autonomy and affiliation for adults. The biological period of adulthood corresponds to Freud's work and love concept (Freud, 1964) and Erikson's stages of intimacy vs isolation and generativity vs stagnation. Cognitive theory further indicates that learning is affected by what happens as a consequence of behavior. The individual's inherited biological structure is therefore shaped both by developmental history and by social interactions. It is assumed that the right experience must occur in the right way at the right time for development to proceed normally; deviations occur when the balance is upset. Since structure and behavior evolve together, behavior, affect and cognition should be theoretically connected (Benjamin, 1979).

In extending this individual perspective to spousal interactions, the concept of focus becomes an essential component of autonomy and affiliation in intimacy. In an ideal adult relationship, focus is well balanced with equal amounts of focus on self and other. In other words, in a good intimate relationship one attends to one's own needs, reactions and states about as often as one focuses on those of another person. When there is focus on another person interdependence involves varying degrees of influence and control.

Infant development is conceptualized as temperament within the psycho-biological framework developed by Rothbart and Derryberry (1980). According to this framework, constitutional differences of the individual are evidenced by reactions of the somatic, endocrine, and autonomic nervous system and by self regulatory processes such as approach and avoidance behaviors that moderate these reaction. Temperament is affected by heredity, maturation and experience as the individual reacts to the environment over time. Thus the infant's temperament characteristics like the parent's characteristics are determined by biological makeup interacting with the environment, especially the social environment.

From a systems perspective it is reasonable to suggest that the baby's individual temperament interacts with patterns of spousal behavior thus determining in part the quality and specific characteristics of the adaptation the family achieves (Belsky, 1981; Pederson, 1975). The questions then raised are: 1) What are the interaction patterns between spouses before and after the birth of the baby? 2) Do individuals who have positive relationships before the birth of the baby continue such relationships after the infant's arrival? 3) Do parents who function better as individuals and as spouses cope better as parents and perceive their infants to be easier to look after? 4) Is the effect in the other direction such that the parent's current functioning reflects dealing with an infant of a particular temperament?

#### Relevant Literature

Marital Adjustment. There is evidence that aspects of the relationship between husband and wife may well be the most important factor affecting adjustment to parenthood (Werner and Cohen, 1969; Shereshefsky and Yarrow, 1973). It has been suggested that the mother's enjoyment and affection for her infant is a function of the quality of her relationship with her husband (Price, 1977; Grossman, et al, 1980; Belsky, 1979; Feiring, C. and Lewis, 1978).

Some studies suggest an association between troubled marital relationships and problems in parenting. Pederson et. al. (1977) reported that the more mothers were negatively oriented toward their infants the more husbands were likely to criticize and blame their wives. Other studies report that individual parents, especially mothers, make compensatory investments in the parenting role when the marital relationship is unsatisfying (Cook, 1979).

Individual Functioning. Anxiety, altered sleep patterns and other somatic complaints are commonly described by new parents, and may be significant to the family's adjustment. New parents often experience

depression during the postpartum period. Fathers who reported depressed moods in the early months of parenting perceived the major contributing factors to be problems in the spousal relationship, decreased time with spouse, and increased need for support (Zaslow et. al., 1981).

Anxious mothers (those having lower maternal feelings and no desire for pregnancy during the prenatal period) perceived their 3-month old infants as being temperamentally difficult. Further, mothers of 3-month olds who were anxious, less interested in the mothering role and less aware of the mother-infant relationship perceived their infants as being difficult (Vaught, Turaldson, Clinton, Egeland, 1981). Although this study suggested that a difficult infant might cause maternal anxiety, the earlier study indicated that high anxiety levels existed prior to the infant's birth. Mothers who were extraverted on a personality inventory rated their infants as temperamentally easy (Bates, Freeland, Launsburg, 1979). For Thomas, Chess and Korn (1982), only the maternal dimension of disapproval/rejection was related to infant difficulty suggesting that more optimal maternal functioning may be related to more optimal infant functioning. Mothers and fathers also report their depression and anxiety are related to their infant's fussy behaviors (Ventura, 1982).

Infant Temperament. The infant is not simply a product of caretaking behaviors, but is a propagator of his own development (Lerner and Busch-Rossnagel, in press). The infant's characteristic modes of responding to the world reflects individual temperament with genetic components and some degree of continuity; infant temperament both affects and is affected by the environment, most notably by the adult caretakers (Bates, 1980).

The terms "easy" and "difficult" have evolved from descriptions of specific infant behaviors associated with temperament (Thomas, et. al., 1968). For example, while easy infants are characterized by positive mood, regular bodily function, moderate intensity of reaction, adaptability and positiveness in a new situation, difficult infants show irregularity of bodily function, high intensity of reaction, withdrawal in the face of new stimuli, slow adaptation to changes in the environment, and negative mood.

Research on parents' responsiveness to infant behavior in terms of temperament is still sparse. Health and child development researchers have tended to focus on other aspects such as mother-infant behavior (Ainsworth, 1973; Lamb, 1977; Parke, 1978), comparisons of mother-infant and father-infant dyads (Belsky, 1979; Clarke-Steward, 1978) and the investigations of the relationship between preschool children's temperamental characteristics and adult female behavior (Gordon, 1981; Simmons, M., Simmonds, N., 1981). Relatively little is known however about the relationship between infant temperament and parental adjustment.

Ventura (1982) reported that parents who perceived their infant as having more smiling and laughing behaviors utilized coping behaviors focused on maintaining family integrity and were more thankful while parents who perceived their infants as having more crying and fussy behaviors were more likely to utilize behaviors directed at their own self development and support. Mothers and fathers also agreed as to the perceived behavior of their infant except that mothers had more positive perceptions of soothing techniques than fathers.

Family Coping. Reestablishing the equilibrium of the family system with the addition of a new infant occurs as parents reorganize boundaries, roles and tasks to accommodate the new member. Each partner must balance between individual autonomy and the need for support as patterns affecting marital and parent-child relationships are established. The individual parent copes with these system changes by specific actions involving mastery, management and adaptation to stress (White, 1974), cognitive appraisal such as problem-solving to change the stressful situation for the better, and emotion-focused coping, involving beliefs and values about the commitments to the relationship (Lazarus, 1981). Knowledge about interactions of spouses and parents should be enriched by examining parent coping behaviors and the factors affecting them.

The relationships of marital adjustment, individual functioning, parental perception of infant temperament and parental coping behaviors have been examined. Although these variables are frequently studied and regarded as key factors in the transition to parenthood appropriate methods for describing and analyzing interaction patterns have been limited. Methods to alleviate these problems are presented in the following section.

Five specific hypotheses will be examined. In short form, they are: 1) antepartum and postpartum autonomy, affiliation and marital adjustment scores will be positively related. 2) Individual functioning will be positively related to marital adjustment autonomy and affiliation, and patterns of friendliness, autonomy and attachment. 3) Parent perception of easy temperament will relate positively to postpartum autonomy, affiliation and marital adjustment, as well as to patterns of friendliness, autonomy and attachment. 4) Parent perception of easy temperament will relate positively to parental coping and post-partum individual functioning. 5) There will be differences between age, socioeconomic status, gender of parent, gender of infant, and infant temperament characteristics, individual functioning, and coping behaviors.

### Methodology

#### 1) Design

This developmental study is conceptualized to describe individual and spousal relationships through patterns of interaction inherent in affiliative and autonomous behaviors. These patterns will be examined at the seventh to eighth month of pregnancy ( $T_1$ ) and three to five months after the infant's birth ( $T_2$ ). Autonomy, affiliation, marital adjustment and individual functioning will also be studied before and after the infant's birth. The relationships between these variables and parent's perceptions of infant temperament and parental coping behaviors will be examined postnatally.

Subsets of parents with positive patterns coefficients reflecting friendliness, autonomy and attachment and parents with negative pattern coefficients reflecting attack, control, and conflict will be investigated in relation to perceptions of infant temperament, individual patterns of coping, family coping and individual functioning. Parent-infant interactions will be examined by coding observations of parents' responses to infant demands in the home setting.

## 2) Instruments

The following instruments will be used to examine variables of interest and to answer the research questions:

| <u>Variable</u>                                                                         | <u>Instrument</u>                                       | <u>Research Question</u>                         |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------|
| Marital Adjustment                                                                      |                                                         |                                                  |
| a) Autonomy-affiliation (T <sub>1</sub> and T <sub>2</sub> )                            | a) Structural Analysis of Social Behavior (SASB)        | H <sub>1</sub> , H <sub>2</sub> , H <sub>3</sub> |
| b) autonomy, control, conflict and attack patterns (T <sub>1</sub> and T <sub>2</sub> ) | b) SASB (Benjamin, 1981)                                |                                                  |
| c) marital adjustment (T <sub>1</sub> and T <sub>2</sub> )                              | c) Dyadic Adjustment Inventory (DAL) (Spanier, 1976)    | H <sub>1</sub> , H <sub>2</sub> , H <sub>3</sub> |
| Individual Functioning (T <sub>1</sub> and T <sub>2</sub> )                             | Brief symptom Inventory (Derogates, 1975)               | H <sub>2</sub> , H <sub>3</sub> , H <sub>4</sub> |
| Parent perception of infant temperament (T <sub>2</sub> only)                           | Infant Temperament Questionnaire (ITQ) (Rothbart, 1978) | H <sub>3</sub> , H <sub>4</sub>                  |
| Parent Coping Individual Coping (T <sub>2</sub> only)                                   | Family Coping Inventory (WCC) (Schafer, et al., 1977)   | H <sub>3</sub> , H <sub>4</sub>                  |
| Family Coping (T <sub>2</sub> only)                                                     | Family Coping Inventory (FCI) (McCubbin et al. 1979)    | H <sub>3</sub> , H <sub>4</sub>                  |

More emphasis will be given to describing the Structural Analysis of Social Behavior model since it operationalizes concepts that predict interactions and this is the major focus of this paper.

Structural Analysis of Social Behavior, (SASB) (Benjamin, 1981). The overall level of affiliation and autonomy in husband and wife interaction will be ascertained using two subscales of the SASB INTREX questionnaires (Form B: female, 144 items; male, 144 items). The self-report instrument and corresponding model are designed to analyze healthy interpersonal interactions as well as to detect double binds, multiple messages, and other complicated behaviors of individuals and families. Observational coding methods are also available.

The model has been derived from previous interpersonal models such as Leary's Interpersonal Circle (Leary, 1957) and Schaefer's circumplex model of parent behavior (Schaefer, 1965). As presented in Figure 1, the SASB model is in three parts.\* The first group of behaviors (appearing at the top)

\*The third plane, Introject, appears at the bottom of the figure and represents intrapsychic behaviors resulting when focus on other is turned inward on the self. It is not used in the current study.

involves focus on another person and transitive action. The second group of behaviors (appearing in the middle) are behaviors that involve focus on the self and the intransitive state. These two groups are interpersonal in nature and describe complimentary behaviors.

The model has two axes for each of the surfaces. The horizontal axis runs from disaffiliation on the left to affiliation on the right; the vertical axis runs from maximal interdependence at the bottom to maximal independence at the top. Each of the surfaces has four quadrants defined by the axes resulting in eight interpersonal quadrants and four intrapsychic quadrants (Benjamin, 1979a).

As shown in Figure 1, each of the points located within the quadrants is made up of mathematically defined proportions of the behaviors described by the axes. For example, chart point 117, you can do it fine as it appears in the upper right hand quadrant of the first surface (focus on other) consists of two units of affiliation and seven units of endorsing freedom (+2, +7). The opposite of 117, you can do it fine, is located 180 degrees away on the model, has opposite coordinate signs (-2, -7) and is called 137, intrude, block, resist. Eighteen pairs of opposites are described on each surface, offering a means for describing benevolent behavior (when the focus is on other) and balance (when focus is on self).

The second surface defines focus on self and represents behaviors that compliment those described on the first surface. For example, the compliment to 117, you can do it fine is 217, asserting on one's own. If one person is focusing on the other with enthusiastic support the natural compliment is for the other to affirm autonomy. Complimentarity in relationships are described by the first two surfaces.

Behavior is coded by a three digit number. The 100 digit describes the surface; 10 digit represents the quadrant. The 1 digit<sup>s</sup> represents the subdivisions<sup>s</sup> of the quadrant ranging from 0 to 8 for a total of nine subdivisions. These quadrant subdivisions describe behavior sets having similar topics and are named tracks. So every chart point ending in the same units number belongs to the same track. The topics covered by the tracks include: 0 = primitive basics; 1 = approach-avoidance; 2 = need-fulfillment; 3 = contact, nurturance; 4 = attachment; 5 = logic and communication; 5 = attention to self development; 6 = balance in relationship; 7 = intimacy-distance; 8 = identity.

Questionnaires allowing family members and others to rate themselves and others in terms of the model have undergone several revisions. Earlier versions have been strongly supported by techniques of autocorrelations among items to confirm structure of the model (within subject); circumplex analysis of correlations confirming the structure (interrelationships between subjects); and factor analysis yielding the proposed underlying dimensions. Test-retest reliability for dimensional ratings have ranged from .85 to .93 and interrater reliabilities for judgement of psychotherapy transactions in terms of the model are in the same range. Internal reliability is high in normal samples (.90) and lower in psychiatric samples (.81) consistent with more chaotic behaviors.

Dyadic Adjustments Scale (Spanier). This widely used 32 item scale is designed to measure adjustment in dyadic relationships including marriage.

Content, criterion-related and construct validity have been reported (Spanier, 1976); factor analysis of the scale yielded four subscales accounting for 94 percent of the covariance among items in one study (Spanier, 1982) but has not been confirmed in another study (Sharpley & Cross, 1982). Reliability has been reported at .96 for both Cronbach's alpha, and Spearman-Brown formula for internal consistency. This tool will be used to examine the concurrent validity of SASB as an indicator of the quality of the marital relationship, in addition to providing information about shifts in marital adjustment around the birth of the first child.

Brief Symptom Inventory (BSI) (Derogates, 1975). Levels of anxiety and depression will be examined using the Brief Symptom Inventory (53 items). The BSI, using a five point scale, is scored and interpreted in terms of nine primary symptom dimensions\*\*; only anxiety and depression subscales will be examined in this study. The checklist has demonstrated sensitivity to low levels of symptoms in normal populations (Derogates, Rickels, Rock, 1976).

Alpha coefficient reliability measures of internal consistency range from .82 to .85. Correlation scores between the SCL-90-R, a longer version of the instrument, and the BSI range from .92 to .98. Concurrent validity was established and discriminant validity was found in studies of subjects with physical and psychological conditions.

Infant Temperament Questionnaire (Rothbart, 1978). Parents' perceptions of infant temperament characteristics will be ascertained using four subscales of this instrument developed for parents of 3, 6, 9, and 12 month old infants. These subscales are soothability (7 items) fear (12 items); distress to limitations (18 items) and smiling and laughter (15 items). Chronbach alphas have been established ranging from .72 for soothability to .85 for smiling and laughter for 3 month old infants (Ventura, 1982). Construct validity has been investigated in longitudinal analysis ranging from .45 for smiling and laughter to .66 for distress limitations for ages 3 months, 6 months, 9 months and one year (Rothbart, 1981).

Ways of Coping checklist, (WCC), (Schafer, et al, 1977). Patterns of parental coping will be investigated to determine individual methods for dealing with stressful events associated with new parenthood. This checklist, based on Lazarus' stress-coping paradigm, contain 68 items classified into two subscales: problem-focused coping (24 items) and emotion-focused coping (40 items). It calls for a binary response, and is answered in terms of a particular stressful event. Four questions are designed to obtain information about how the stressful situation was appraised.

Cronbach's alpha on two randomly selected administrations which were analyzed independently were .80 for the problem scale and .82 for the emotional scale. Construct validity was examined using principal factor analysis with 78 percent of the problem-focused items identified and 68 to 73 percent of the emotion-focused items identified. This tool will be used to examine construct validity between the Family Coping Inventory as an indication of family coping as well as mediator of individual coping. (Folkman, et al 1980).

\*\*Somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychotism.

Family Coping Inventory, (FCI) (McCubbin, Boss, Wilson, Dahl, 1979). Parental coping behaviors will also be measured using the short form 28 item coping inventory plus six additional items identified as helpful to fathers (Ventura, 1980, Appendix F). This composite tool measures the couple's use of emotional and network support in the family and the community to manage stress (total = 34 items). The instrument will determine the usefulness to parents of various family-oriented coping behaviors using a four point scale (1 = no help to 4 = very helpful). The FCI has been used in three populations of subjects (primarily women) experiencing boundary change of separation and in one study of men and women experiencing boundary change of addition (Ventura, 1980). Cronbach's alpha reliabilities range from .71 to .85. Construct validity was examined in two previous studies with two coping patterns identified (.80 to .85 range).

#### Parent-Infant Observation

Equipment. The TSR-80 Model 100, a hand held portable computer, is a flexible data management system that, with software programming, can be adapted to record human communication behavior. The coder presses keys documenting the behavior of interest as it occurs. The equipment clocks, adds time or duration information to each event coded, and stores the event in sequence. Stored data can then be transferred directly to a larger computer for subsequent analysis. Data can be recorded for single subjects or groups of subjects. Nonsequential aspects of the observational data, as well as general investigation of dependency relationships in multivariate observational data can be statistically analyzed. Voice comments can be recorded on a separate soundtrack for enhanced understanding of the printout of observational codes.

Procedure. Parent-infant observations will be accomplished in three stages during a 9 to 12 month period. The researchers will first become familiar with the computer and software program. Then observations of mother, father and infant will be made in home settings. The categories of feeding, sleeping, bathing, dressing, daily activities and soothing defined in the infant temperament questionnaire (Rothbart, 1978) will be used to provide meaning for the context in which observed family interactions are observed (Parker, 1978).

Behavioral coding specifications will be derived from these initial observations and decisions will be made as to whether patterns of behavior are sequential or concurrent. Sequential patterns describe changes from moment to moment (mutually exclusive); concurrent patterns describe what goes together at a given moment (not mutually exclusive). For example, the mother could look at the father, frown, then move toward the crying infant, or she could do all three in a concurrent pattern (Bukeman, 1978). Meanwhile, the father could remain fixed before the television screen during the entire episode. Of primary interest in the observations is the manner in which the probability for some behaviors, like the mother caring for the baby, are altered by the presence or absence of other behaviors, particularly in regard to the presence of, and interaction with, the father.

The second stage of the work will entail training coders using videotapes and films of mother-father-infant interactions as well as actual

observations. Interrater reliabilities will be developed. In the final phase, data collection and analysis will begin.

### 3) Data Analysis

Hypothesis testing will be accomplished using the following procedures:

- H<sub>1</sub> Weighted autonomy-affiliation scores (SASB) will be obtained for husband and wives. Pearson-product moment correlations between SASB and DAI scores will be calculated to examine concurrent validity of SASB as a measure of marital adjustment. Patterns of autonomy, control, conflict and attack coefficients will be determined for each spouse.
- H<sub>2</sub> The relationship among the individual functioning variables (depression, anxiety - BSI), the autonomy-affiliation scores (SASB), and marital adjustment scores (DAI) will be determined using Pearson-product moment correlations. Pearson-product moment correlations will also be obtained between these variables and parent's age and socioeconomic status. Paired t-tests will be performed to examine differences between parent's sex and each of these variables (i.e. individual functioning, autonomy-affiliation, marital adjustment) at T<sub>1</sub> and T<sub>2</sub>. A two sample t-test will examine the differences between parents of boys' and parents of girls' groups and these three variables. The scores for the two individual functioning variables, parent's age, and socioeconomic status will be compared using analysis of variance.
- H<sub>3</sub> The association between infant temperament characteristics (ITQ) and the marital adjustment measures (SASB, DAI) will be investigated by Pearson-product moment correlations. Matched pair t-test will be utilized to describe differences in infant observations between mothers and fathers while a two sample t-test will examine differences in parents of boys and parent of girls' groups. Scores for the four infant temperament subscales, parent's age and socioeconomic status will be compared using analysis of variance. Observational data of mother-father-infant interactions will be examined to identify behavior patterns determining behavior sequences, to probe causal relations between two variables, and to investigate causal intervals.
- H<sub>4</sub> The two coping scales (FCI and WCC) will be factor analyzed using varimax rotation procedures and calculation of factor scores will be obtained. Factor scores will be used to classify husbands and wives into categories of coping behaviors. One way analysis of variance will be used to compare these patterns with infant temperament variables (ITQ) and individual function variables (BSI). Canonical correlation will be utilized to examine concurrent validity of the two instruments (FCI and WCC) as a measure of coping.
- H<sub>5</sub> Descriptive statistics will be obtained for age, gender of parent and infant, socioeconomic status and race. The scores for factors determined for the two coping instruments, parent's age and socioeconomic status will be compared using analysis of variance. The factor scores for coping factors and race will be examined by chi-square for independence.

#### 4) Methodological Issues

a) Sample. The instruments described in this paper are directed at a middle class, well educated population. Earlier studies (Ventura, 1982; Ventura, in progress) indicate that parents with less income and education do not respond as positively to data collection by questionnaire as do middle class parents; this difference may reflect variations in reading and comprehension skills and stress and coping patterns. Despite a large body of research on new parenthood, middle class family characteristics are most often described. Findings have not been generalized across socioeconomic levels and cultures, and this is an important consideration for family interactive processes.

b) Methods. Except for parent-infant observations, only self report measures of coping behaviors, individual functioning and spousal interactions are included in the battery of instruments. Spousal interactions can be objectively investigated with the SASB Model which has been used to code interactive processes as well as the content of what is being said (Benjamin, 1982). However, the interactive process of the infant on the spousal dyad and the joint parental influence on the infant remain problematic both conceptually and methodologically (Belsky, 1981). This could be methodologically improved by examining dimensions of marriage such as shared activities and division of labor (La Rossa and La Rossa, 1981). However, discrepancies between self description and observations by others, problems of varying moods or status, and problems of different behaviors from the same person in different relationships remain.

The issue of social desirability must be addressed in regard to all instruments in this proposed study. Benjamin (1974) and Spanier (1976) discussed this problem at length in regard to the SASB and the DAI respectively, and concluded that adequate steps were taken to minimize this problem in the development of these tools. Benjamin concluded that most subjects participated in such studies in accord with the spirit of honesty, openness and desire for self knowledge; thus, if subjects give socially desirable responses, it is assumed that these subjects believe their statement to be true.

c) Analysis. The debate of family or individual analysis measures is also evident in this paper. If on the one hand, one assumes the mother's and father's self-report responses to be independent, the individual becomes the unit of analysis. On the other hand, if one assumes, as does this author, that new parenthood constitutes a couple experience, mother and father responses are related and the couple becomes the unit of analysis.

#### Summary

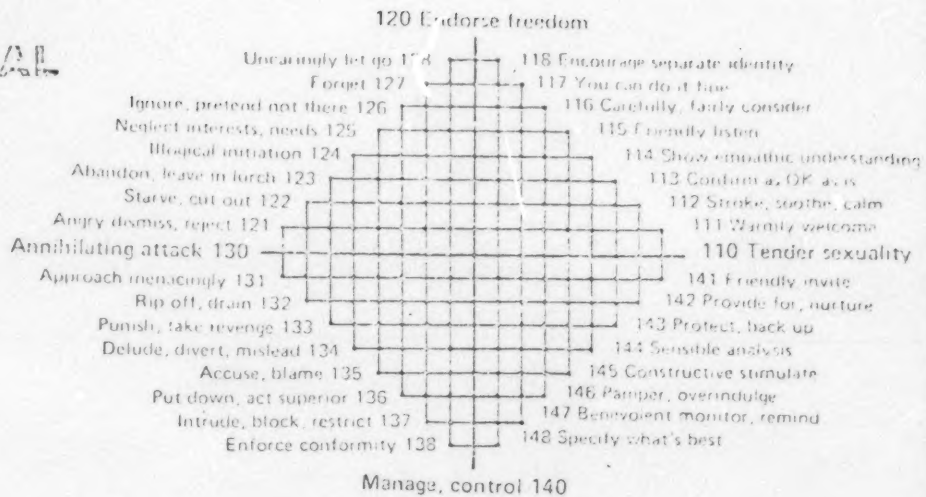
This paper has described one way of conceptualizing and measuring family interactions in the childbearing family. The emerging family is a logical starting point in the investigation of intrafamilial processes for improving theoretical perspectives and techniques. Improvements in theory and methods could then be applied to more complex family structures. This is no simple task for, as Benjamin notes "...specification of psychological components is likely to be as complex in construction and as revolutionary as the notion of structure has been in nuclear physics and in genetics" (Benjamin, 1981).

However, progress in theory on the interactive processes of new families will lead to gains in measurement, and by strengthening measurement procedures, future theory will be advanced.

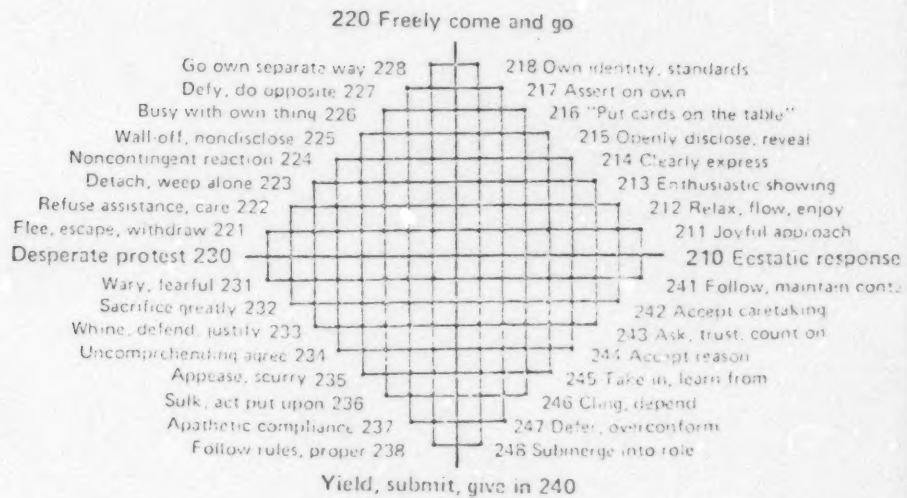
Figure 1

# INTERPERSONAL

OTHER



SELF



# INTRAPSYCHIC

Introject of  
OTHER  
to SELF

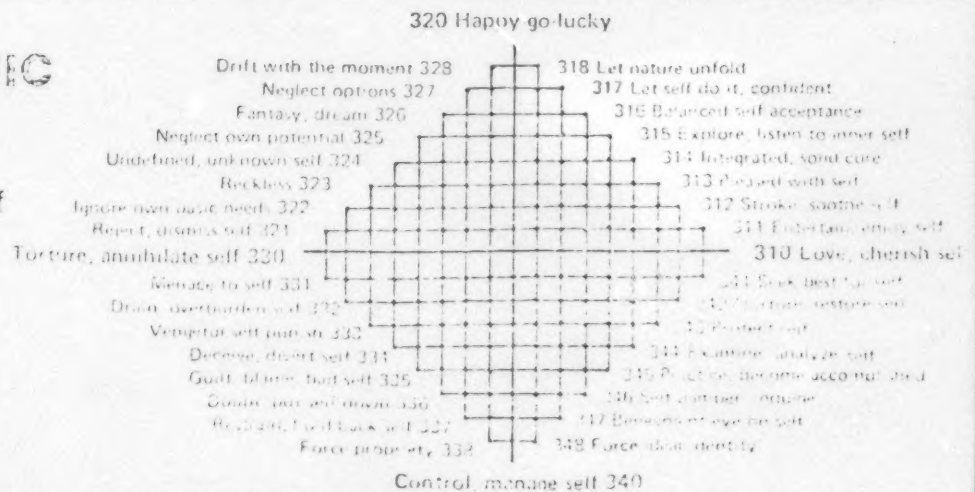
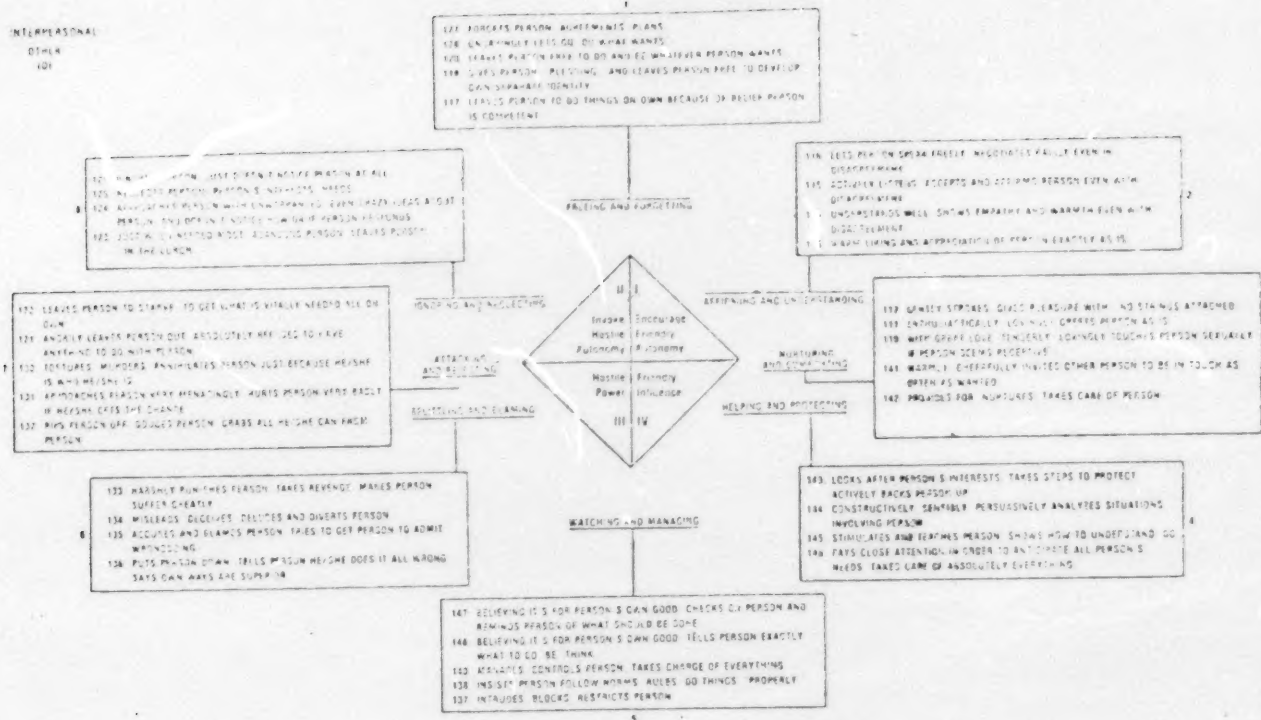


Figure 1  
Chart of Social Behavior. (Full SASB Model). From "Structural Analysis of Differentiation Failure". *Psychiatry*, 1979, 42, 1-22. Copyright 1979, William Alanson White Psychiatric Foundation.

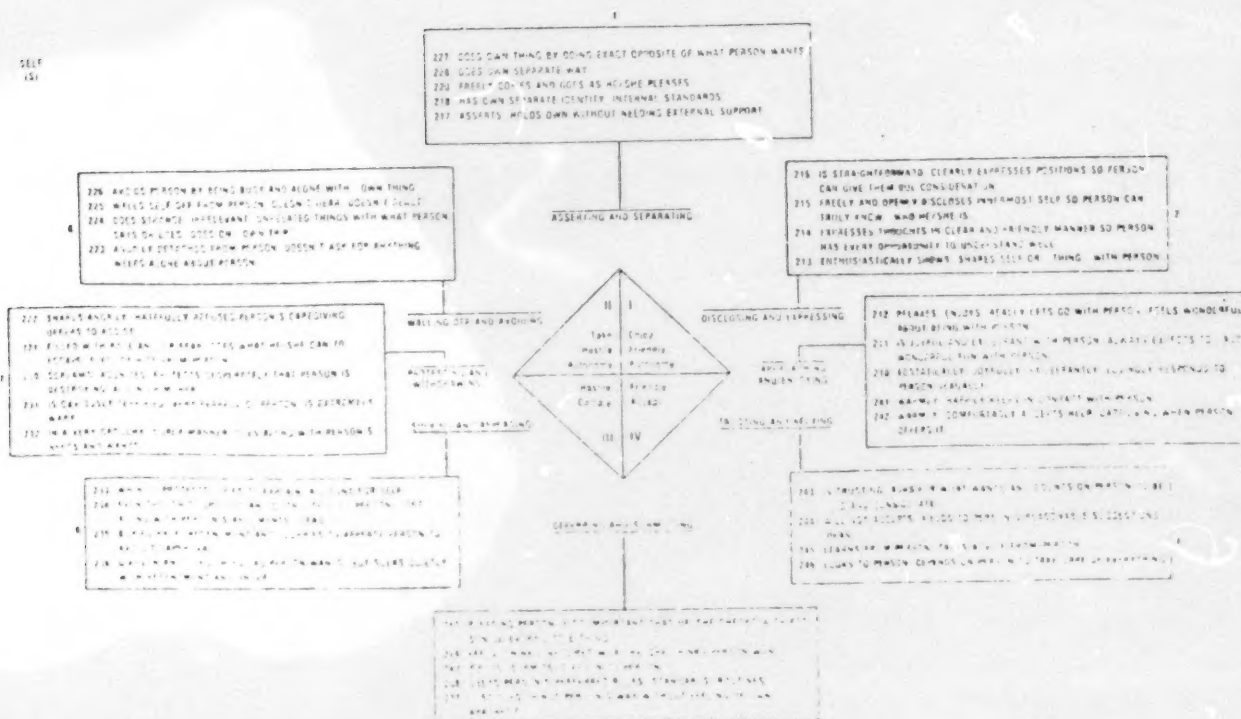
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Figure 1 (cont.)

INTERPERSONAL  
OTHER  
101



SELF  
151



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